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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,959

08/27/2003

Alfred Edlinger

1714880

4697

7590

06/23/2006

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EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/648,959

**Applicant(s)**

EDLINGER, ALFRED

**Examiner**

Queenie Dehghan

**Art Unit**

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-36 is/are pending in the application.
- 4a) Of the above claim(s) 16-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 10-15, drawn to a process for pulverizing melts, classified in class 65, subclass 19.
  - II. Claims 16-36, drawn to an apparatus for, classified in class 65, subclass 142.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group I and Group II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as vaporizing liquids.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Art Unit: 1731

5. During a telephone conversation with Robert Schneider on May 11, 2006 a provisional election was made with traverse to prosecute the invention of Group 1, claims 10-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claim 10, the phrase "especially" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlinger (WO 02/04154 as translated in US 2002/0134198) in view of Barnard (3,063,093). Edlinger disclose ejecting melts into a granulating chamber as a shroud surrounding a propellant stream (fig. 1&2, [0003], [0016]). Edlinger also discloses the mixing of hot combustion gases with the propellant stream ([0018], fig. 1), but do not disclose heating melts with burners in an antechamber or the use of hot combustion gases from the antechamber. Barnard teaches heating melts with burners in an antechamber (col. 2 lines 65-70) and using hot combustion gases exhausted from the antechamber (col. 4 lines 29-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the burners for heating melts in an antechamber as suggested by Barnard and to utilize the exhaust combustion gases from the antechamber as a source of combustion gases to be mixed with the propellant stream of Edlinger in order to better utilize the excess heat from the antechamber for efficient energy use, as taught by Barnard.

11. Regarding claim 11, Edlinger disclose the suction of the combustion gases such as CO and O<sub>2</sub> into a ring chamber surrounding a propellant stream nozzle (7) and are ejected with the propellant stream as a core of a tube-shaped melt stream into the granulating chamber (13) in figure 1 ([0018]).

12. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlinger (WO 02/04154 as translated in US 2002/0134198) in view of Barnard (3,063,093), as applied to claims 10 and 11 above, and further in view of Edlinger (WO 01/62987 as translated in US 6,660,223). Edlinger (translated in '198) and Barnard fail

to disclose stressing the shroud at its output with hot gases. Edlinger (translated in '223) teach a shroud stressed at its output into the granulating chamber on its outside with hot gases (col. 4 lines 22-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to stress the shroud with the hot gases as taught by Edlinger '223 in the method of Edlinger '198 and Barnard in order to further atomize the melts, as taught by Edlinger '223.

13. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlinger (WO 02/04154 as translated in US 2002/0134198) in view of Barnard (3,063,093), as applied to claims 10 and 11 above, and further in view of Searight et al. (3,138,444). Edlinger translated in '198 and Barnard fail to disclose stressing the shroud after its output into the granulating chamber with hot gases. Searight et al. teach a shroud that is stressed after its output into to granulating chamber on its outside with hot gases (col. 2 lines 41-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to stress the shroud with the hot gases as taught by Searight et al. in the method of Edlinger '198 and Barnard in order to direct the emergent stream toward a focal point, as taught by Searight et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie Dehghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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